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10/004571
12/04/01

BOX PATENT APPLICATION
ASSISTANT COMMISSIONER FOR PATENTS
P.O. Box 2327
ARLINGTON, VA 22202

Express Mail No.: EL603009481US

Attorney Docket No.: 2003080-0071

Date Filed: December 4, 2001

UTILITY PATENT APPLICATION TRANSMITTAL

(for new nonprovisional applications under 37 C.F.R. § 1.53(b))

Dear Sir:

Please find enclosed a patent application and papers as follows for:

Inventor(s):

<u>Given Name (first and middle)</u>	<u>Family Name or Surname</u>	<u>Residence (City and State or Foreign Country)</u>
Samuel J.	Danishefsky	Englewood, NJ
Peter	Bertinato	Old Lyme, CT
Dai-Shi	Su	New York, NY
Dongfang	Meng	New York, NY
Ting-Chao	Chou	Paramus, NJ
Ted	Kamenecka	New York, NY
Erik J.	Sorensen	San Diego, CA
Aaron	Balog	New York, NY
Kenneth A.	Savin	New York, NY

Title of the Invention: Synthesis of Epothilones, Intermediates Thereto, Analogues and Uses Thereof

A) APPLICATION ELEMENTS:

- 1) ☒ **Fee Transmittal Form** (original and duplicate submitted for fee processing)
- 2) ☒ **Applicant Claims Small Entity Status** (see 37 C.F.R. § 1.27)
 - a) ☒ Statement Verifying Small Entity Status (optional)

3) ☒ **Specification**

TOTAL PAGES: 112

(87 pp. description; 24 pp. claims; 1 pg. abstract)

- ☒ Descriptive Title of the Invention
- ☒ Cross References to Related Applications (if applicable)
- ☒ Statement Regarding Federally Sponsored R & D (if applicable)
- ☐ Reference to sequence listing, a table, or a computer program listing appendix
- ☒ Background of the Invention
- ☒ Summary of the Invention
- ☒ Description of the Drawing (if filed)
- ☒ Detailed Description of the Invention
- ☒ Claim(s)
- ☒ Abstract of the Invention

4) ☒ **Drawing(s)** (35 U.S.C. § 113)

TOTAL SHEETS: 59

- a) ☒ Formal Drawings (if checked)

TOTAL SHEETS: 76

5) ☒ **Oath or Declaration**

TOTAL PAGES: 8

- a) ☐ Newly Executed (original or copy)

- b) ☒ Copy from a prior application (37 C.F.R. § 1.63(d))-for
continuation/divisional application

- i) ☐ Deletion of inventor(s): Signed Statement deleting inventor(s) named
in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).

- c) ☐ Unexecuted

6) ☐ **Application Data Sheet**. See 37 C.F.R. § 1.76.

7) ☐ **CD-ROM or CD-R in duplicate, large table or Computer Program
(Appendix)**

8) ☐ **Nucleotide and/or Amino Acid Sequence Submission** (if applicable, all are
necessary)

- a) ☐ Computer Readable Form (CRF)

- b) ☐ Specification Sequence Listing on:

- i) ☐ CD-ROM or CD-R (2 copies); or

- ii) ☐ Paper

- c) ☐ Statements verifying identity of above copies

B) ACCOMPANYING APPLICATION PARTS:

- 9) ☒ **Assignment Papers** (cover sheet & document(s))
- 10) ☐ **37 C.F.R. § 3.73(b) Statement** (when there is an assignee)
- 11) ☒ **Power of Attorney**
- 12) ☐ **English Translation Document** (if applicable)
- 13) ☒ **Information Disclosure Statement (IDS)/PTO-1449 (6 pp. total)**
- 14) ☐ **Copies of IDS Citations**
- 15) ☒ **Preliminary Amendment (11 pp. (includes marked-up copies))**
- 16) ☒ **Return Receipt Postcard (MPEP 503)** (specifically itemized)
- 17) ☐ **Certified Copy of Priority Document(s)** (if foreign priority is claimed)
- 18) ☒ **OTHER:** (if applicable, specified below)

Identification of Patent Under 37 CFR §1.607(c) (1 pg.)

C) FOR CONTINUING APPLICATIONS: (the appropriate box is checked, and certain information is provided below and in a preliminary amendment)

☒ continuation ☐ divisional ☐ continuation-in-part (CIP)

of prior application no.: 09/874,514

filed: June 5, 2001

examiner: T. Solola

group/art unit: 1626

for continuation or divisional applications only: The entire disclosure of the prior application, from which an oath or declaration is supplied as detailed above, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference.

D.) PRIORITY CLAIM(S):

This application claims the benefit under 35 U.S.C. § 120 of any United States application(s) or PCT international application(s) designating the United States of America listed below:

<u>Application Serial No.</u>	<u>Filing date</u>	<u>Status (patented, pending, abandoned)</u>
09/874,514	June 5, 2001	Pending

This application claims the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

<u>Application Serial No.</u>	<u>Filing date</u>	<u>Status (pending, expired, abandoned)</u>
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E) METHOD OF PAYMENT OF FILING FEES FOR THIS APPLICATION:

- ☒ Applicant claims small entity status 37 C.F.R. § 1.27.
- ☒ A check is enclosed to cover the filing fees.
- ☒ The commissioner is hereby authorized to charge filing fees or to credit any overpayment to deposit account number 03-1721.

Basic Filing Fee (Small Entity)	\$370.00
Additional Fees:	
Total Number of Claims in excess of 20: (201- 20) x \$9	\$1,629.00
Number of Independent Claims in excess of 3:(25- 3) x \$42	\$924.00
Multiple Dependent Claims (\$140):	<u>\$140.00</u>
Total Filing Fee:	\$3,063.00

F) CORRESPONDENCE ADDRESS:



☒ Customer Bar Code Label:

24280

PATENT TRADEMARK OFFICE

☒ Correspondence Address:

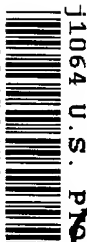
Karoline K.M. Shair, Ph.D.
Choate, Hall & Stewart
53 State Street
Exchange Place
Boston, MA 02109
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fax: (617) 248-4000

Respectfully Submitted,

Karoline K.M. Shair, Ph.D.
Registration No. 44,332

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12/04/01



1064 U.S. P.

PTO/SB/17 (11-01)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$) 3,063.00

Complete if Known

Application Number	
Filing Date	December 4, 2001
First Named Inventor	Danishefsky, et al.
Examiner Name	T. Solola
Group Art Unit	1626
Attorney Docket No.	2003080-0071

METHOD OF PAYMENT (check all that apply)☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit Account Number
Deposit Account Name

03-1721

Choate, Hall & Stewart

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☒ Credit any overpayments
☐ Charge any additional fee(s) during the pendency of this application
☒ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
101	740	201	370	Utility filing fee	\$370.00
106	330	206	165	Design filing fee	
107	510	207	255	Plant filing fee	
108	740	208	370	Reissue filing fee	
114	160	214	80	Provisional filing fee	
SUBTOTAL (1)					(\$) 370.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

		Extra Claims		Fee from below		Fee Paid
Total Claims	201	-20** =	181	X	9.00	= 1,629
Independent Claims	25	-3** =	22	X	42.00	= 924
Multiple Dependent						140 = 140

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
103	18	203	9	Claims in excess of 20
102	84	202	42	Independent claims in excess of 3
104	280	204	140	Multiple dependent claim, if not paid
109	84	209	42	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$) 2,693.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity | Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for <i>ex parte</i> reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	400	216	200	Extension for reply within second month	
117	920	217	460	Extension for reply within third month	
118	1,440	218	720	Extension for reply within fourth month	
128	1,960	228	980	Extension for reply within fifth month	
119	320	219	160	Notice of Appeal	
120	320	220	160	Filing a brief in support of an appeal	
121	280	221	140	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,280	241	640	Petition to revive - unintentional	
142	1,280	242	640	Utility issue fee (or reissue)	
143	460	243	230	Design issue fee	
144	620	244	310	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17(q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279	370	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 0.00

SUBMITTED BY

Name (Print/Type)	Karoline K.M. Shair, Ph.D.	Registration No. (Attorney/Agent)	44,332	Telephone	(617) 248-5216
Signature	<i>Karoline K.M. Shair</i>			Date	December 4, 2001

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Danishefsky *et al.* Examiner : T. Solola
Serial No. : not yet assigned Art Unit : 1626
Filed : December 4, 2001
For : *Synthesis of Epothilones, Intermediates Thereto, Analogues and Uses
Thereof*

BOX PATENT APPLICATION
ASSISTANT COMMISSIONER FOR PATENTS
US PATENT AND TRADEMARK OFFICE
P.O. Box 2327
ARLINGTON, VA 22202

EXPRESS MAIL NO: EL603009481US

Sir:

IDENTIFICATION OF PATENT UNDER 37 CFR § 1.607(c)

As required by 37 CFR § 1.607(c), Applicants submit that the above-referenced application, as filed herewith on December 4, 2001, presents a claim (claim 59) that corresponds substantially to claim 1 of patent number 6,156,905, issued December 5, 2001. Applicants would like to point out that US Patent No.: 6,156,905 is being cited in the Information Disclosure Statement filed herewith and was also cited in the Information Disclosure Statements filed in the parent patent applications: 09/874,514, filed June 5, 2001, and 08/986,025, filed December 3, 1997, now U.S. Patent No. 6,242,469, issued June 5, 2001.

Please charge any fees or credit any overpayments to our Deposit Account No. 03-1721.

Respectfully submitted,

Karoline K. M. Shair
Karoline K.M. Shair, Ph.D.
Reg. No. 44,332

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Date: December 4, 2001
3341742_1.DOC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Danishefsky *et al.* Examiner : T. Solola
Serial No. : not yet assigned Art Unit : 1626
Filed : December 4, 2001
For : *Synthesis of Epothilones, Intermediates Thereto, Analogues and Uses Thereof*

BOX PATENT APPLICATION
ASSISTANT COMMISSIONER FOR PATENTS
US PATENT AND TRADEMARK OFFICE
P.O. Box 2327
ARLINGTON, VA 22202

EXPRESS MAIL No: EL603009481US

**STATEMENT FILED PURSUANT TO THE DUTY OF
DISCLOSURE UNDER 37 CFR §§1.56, 1.97 AND 1.98**

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, Applicants request consideration of this Information Disclosure Statement.

PART I: Compliance with 37 C.F.R. §1.97

- A. ☒ This Information Disclosure Statement has been filed:
1. ☒ within three months of the filing date of the above identified U.S. Patent application other than a continued prosecution application under § 1.53(d);
 2. ☐ within three months of the filing date of the entry of the National Stage, as set forth in 37 C.F.R. §1.491, in an International application;
 3. ☐ before the mailing date of the first Office Action on the merits in the above-identified application; or
 4. ☐ before the mailing of a first Office Action after the filing of a request for continued examination under § 1.114.

No fee or certification is required.

PART II - 37 CFR § 1.98 Content of Information Disclosure Statement:

[X] Applicants hereby make of record in the above-identified application all patents, publications, applications or other information submitted for consideration by the Office listed on the attached form PTO-1449 (modified). The order of presentation of the patents, publications, applications or other information should not be construed as an indication of the importance.

Remarks

A copy of each of the above-identified U.S. and foreign patent(s), publication(s), application(s) or other information submitted is enclosed unless otherwise indicated on the attached form PTO-1449 (modified). It is respectfully requested that:

1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;
2. The enclosed form PTO-1449 be signed by the Examiner to evidence that the cited information been fully considered by the Patent and Trademark Office during the examination of this application; and
3. The citations for the patent(s), publication(s), application(s), or other information be printed on any patent which issues from this application.

By submitting this Information Disclosure Statement, Applicants make no representation that a search has been performed, of the extent of any search performed, or that more material information may not exist.

By submitting this Information Disclosure Statement, Applicants make no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

By submitting this Information Disclosure Statement, Applicants make no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by Applicants, the Examiner is urged to form his or her own conclusions regarding the relevance of the cited materials. An early and favorable action is hereby requested.

Respectfully submitted,



Karoline K. M. Shair, Ph.D.

Reg. No. 44,332

Choate, Hall & Stewart
Exchange Place
53 State Street
Boston, MA 02109
(617) 248-5000
Date: December 4, 2001
3341978_1.DOC